



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

Pr

Al

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/077,207 05/26/98 INQUE

S JA040840

EXAMINER

MM91/0404

OLIFF & BERRIDGE
PO BOX 19928
ALEXANDRIA VA 22320

PRENTY, M

ART UNIT

PAPER NUMBER

2822
DATE MAILED:

04/04/01

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/077,207

Applicant(s)
INOUE et al.

Examiner
Prenty

Group Art Unit
2822



☒ Responsive to communication(s) filed on Jan 25, 2001

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-4, 7, and 9-24 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-4, 7, and 9-24 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

This Office Action is in response to the papers filed January 25, 2001.

Claims 1-4, 7, 9-21 and 24 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claim 1 is not at all clear in reciting: "wherein at least one of the channel region and at least one component part, having at least one component part provided above or on the channel region." Claims 2-4, 7 and 9-21 depend on independent claim 1 and are thus similarly unclear. Claims 2-4, 7, 9-14 and 17-21 are also indefinite because "said heat dissipating extension" lacks antecedent basis. Independent claim 24 is unclear in reciting "wherein the components with connecting terminals forming in a line."

Claims 23, 1-4, 7 and 9-21 are rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the specification does not describe a gate electrode provided with an outwardly extending portion above the channel region, as recited in independent claim 23 and as possibly recited in unclear independent claim 1. Rather, the specification describes a gate electrode provided with an outwardly extending portion above the source-drain region. See the Figure 2 disclosure, for example. Claims 2-4, 7 and 9-21 depend on independent claim 1 and are thus similarly rejected.

Claims 1, 14-17 and 24, at least insofar as they can be understood, are rejected under 35 U.S.C. §102(e) as being anticipated by Koyama et al. (United States Patent 5,616,935 already of record). See Koyama et al's Figure 2A, for example, and note the source-drain wiring layer extension.

Claims 1-3, 17 and 22-24, at least insofar as they can be understood, are rejected under 35 U.S.C. §102(e) as being anticipated by Kerber et al. (United States Patent 5,623,155 already of record). See Kerber et al's Figure 1, for example, and note the channel extension 1 and the gate extension 6.

Claims 1-3, 9, 17, 23 and 24, at least insofar as they can be understood, are rejected under 35 U.S.C. §102(e) as being anticipated by Han et al. (United States Patent 5,920,085 already of record). See Han et al's Figure 4, for example, and note the gate and source/drain extensions.

Claims 1, 9, 15, 16 and 24, at least insofar as they can be understood, are rejected under 35 U.S.C. §102(e) as being anticipated by Yamazaki et al. (United States Patent 5,959,313 already of record). See Yamazaki et al's Figures 3 and 6, for example, and note the source/drain extensions.

Claims 1-3, 17, 23 and 24, at least insofar as they can be understood, are rejected under 35 U.S.C. §102(e) as being anticipated by Miyamoto et al. (United States Patent 6,064,090 already of record). See Miyamoto et al's Figures 2, 14 and 31, for example, and note the gate extension.

The applicant's arguments with respect to Koyama et al. are moot in view of the new grounds of rejection and/or unpersuasive because they fail to acknowledge and address Koyama et al's source-drain wiring layer extension.

The applicant's arguments with respect to Kerber et al. are moot in view of the new grounds of rejection and/or unpersuasive because they fail to acknowledge and address Kerber et al's channel and gate extensions.

The applicant's arguments with respect to Han et al. are either moot in view of the new grounds of rejection and/or unpersuasive because they fail to acknowledge

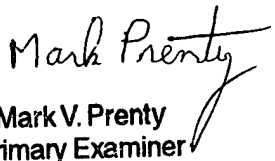
and address Han et al's gate and source/drain extensions.

The applicant's arguments with respect to Yamazaki et al. are either moot in view of the new grounds of rejection and/or unpersuasive because they fail to acknowledge and address Yamazaki et al's source/drain extensions.

The applicant's arguments with respect to Miyamoto et al. are either moot in view of the new grounds of rejection and/or unpersuasive because they fail to acknowledge and address Miyamoto et al's gate extension.

The only patentable subject matter in this application, if any, is that recited in the August 18, 2000 version of claims 4, 10-13 and 18-21. The examiner recommends that the applicant cancel pending claims 1-3, 7, 9, 14-17 and 22-24, and rewrite the August 18, 2000 version of dependent claims 4, 10-13 and 18-21 in independent form.

Registered practitioners can telephone examiner Prenty at (703) 308-4939.
All other parties should telephone (703) 308-0956.


Mark V. Prenty
Primary Examiner